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Forest Service Library

Southern half

NATIONAL FORESTS

INTERMOUNTAIN REGION (Southern Half)



Northern Arizona, Utah, and Nevada



F-253066

UNITED STATES
DEPARTMENT OF AGRICULTURE



Forest Service—Intermountain Region

Prepared by Regional Forester
Ogden, Utah

FOREWORD

The Intermountain National Forest Region (Region 4 of the United States Forest Service) covers Utah, central and eastern Nevada, Idaho south of Salmon River, western Wyoming, and northern Arizona. Headquarters of the regional forester in charge are at Ogden, Utah. Each of the 26 national forests in the region is in direct charge of a forest supervisor, and the forests are divided into ranger districts, each with a ranger in charge.

USES OF LAND

What shall be done with the uncultivated land which usurps 93 per cent of Idaho, 96 per cent of Utah, 97 per cent of Wyoming, 99 per cent of Nevada, and 97 per cent of Arizona? This 90-odd per cent of these five States is valuable principally for watershed, for forage, timber, and wild-life production, and for recreation. Mineral resources, of course, should be developed, but these occupy only a relatively small area. The livestock industry, the lumber industry, irrigation, water-power development, water uses in general, mining, and other economic activities depend fundamentally either on the resources drawn from the mountains or upon the care given the vegetative cover on their slopes.

In the main, the highest, roughest, and least accessible portions of the land in question make up the 30 million acres in the 26 national forests of the Intermountain Region, the south half of which is described in this folder. In spite of ruggedness, however, these lands play a very important rôle in the life of the States.

The chief consideration in the management of the national forests is to make them as productive and as serviceable as possible to the tributary communities.

WATERSHEDS

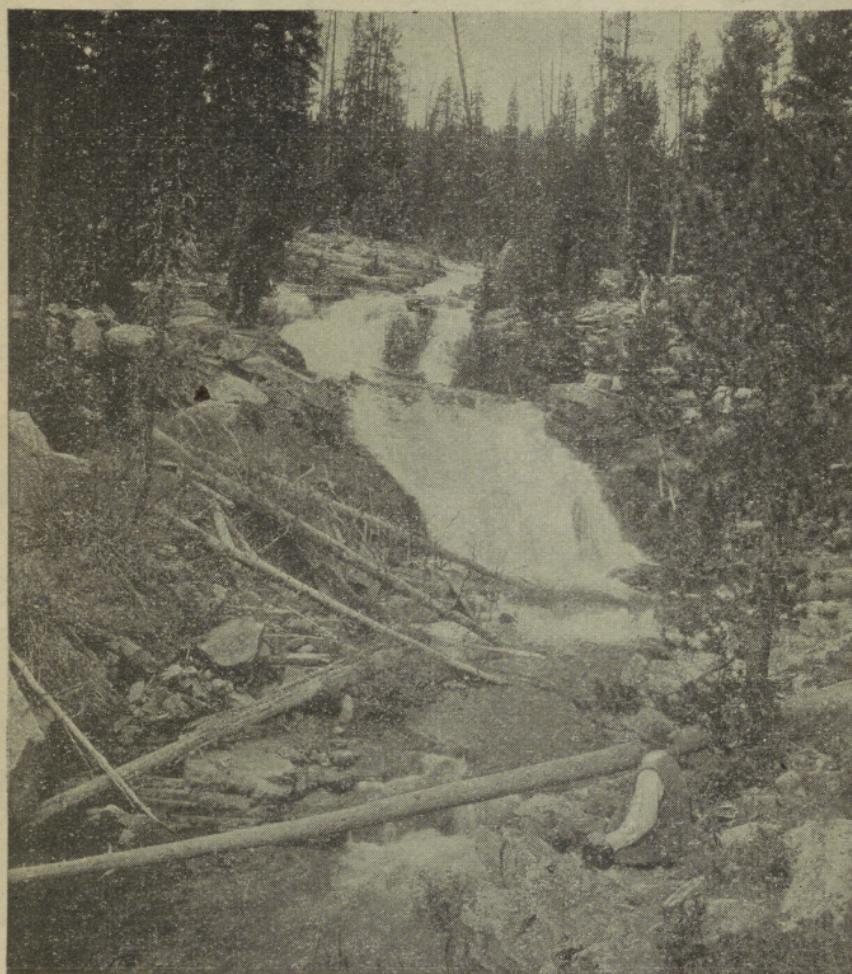
No State or municipality can be any bigger than its water supply.

Millions of dollars are spent annually in storing, diverting, and controlling water in the lower reaches of streams, after it has attained its full force, and after its destructive power, its regularity of flow, its usability, and the amount of sediment contained have been determined. Forestry aims to control water at the source before the character of its flow has been formed.

If the mountain vegetation is removed by fire, by destructive lumbering, by excessive grazing, or by any other means, erosion and floods follow. Showers cut away unprotected earth and make steep-sided channels through which even the normal spring freshets from the gently melting snow rush with great violence, car-

rying along mud, gravel, and stone, clogging irrigation ditches and canals, filling reservoirs, and doing much damage. In some instances the accumulation of silt renders reservoirs entirely useless.

Erosion does damage in other ways. By removing the top layer of earth, it robs plant life of the most nourishing ingredients of the soil. On the other hand, grass, shrubs, and trees make the soil porous, hold it in place, intercept and make difficult the formation of gullies, and filter water so that sediment does not fill



Clear stream from protected watershed.

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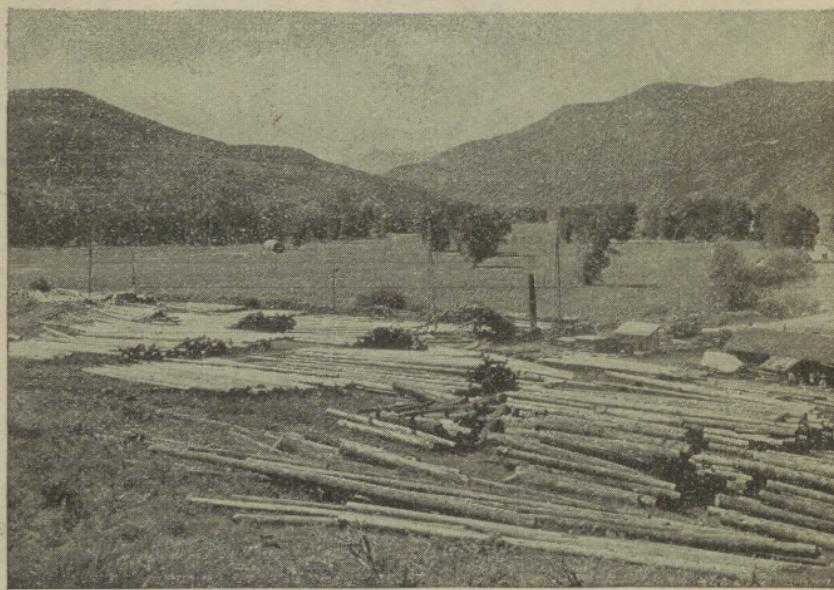
up the pores in the soil. On a properly functioning watershed, the precipitation seeping into the ground forms a natural reservoir and gradually comes out in springs with a clear and comparatively uniform flow throughout the season.

Six thousand irrigation enterprises, comprising 3½ million acres, depend upon watersheds within the national forests of the Intermountain Region.

FORAGE

Two-thirds of the area of the forests of the Intermountain Region is used for grazing. The national forest range is divided into over 2,000 allotments, each of which has a separate management plan developed

by the ranger and stockman together, and stating for each year upon which portion grazing shall be deferred until seed matures; the date stock shall enter and leave; the number to be grazed; and the method for handling the stock in order to effect the best possible utilization of forage without impairing the vitality of the plants or wasting forage, which is a perishable crop. A total of 340,000 cattle and horses and 2,628,000 sheep belonging to 7,446 stockmen are grazed on these forests annually; 600 fenced plots are maintained to compare ungrazed with grazed areas in production of forage. Many other studies are conducted throughout the region by the Forest Service research organization to guard against erosion, to insure complete protection of watersheds, to improve methods of handling stock, and to discover methods of producing more and better livestock feed. Water is developed on dry ranges, drift fences are constructed, driveways are established, salt grounds are posted, allotments are patrolled to prevent trespass, camp grounds are protected, and the management of the range is adjusted to needs not only of the livestock industry, but to the needs of all other users of the forest.



F-253636

Treating lodgepole pine telephone poles cut on a Utah National Forest

TIMBER

In the forest the seedlings are frequently found in dense thickets. Thousands of these have to die out before the remaining seedlings can have light, moisture, and soil nourishment enough to grow. Competition for life is keen. The larger the tree the more room required. Forestry attempts to thin out the timber before nature does it, thus hastening growth of the remaining trees and eliminating waste. When the remaining trees mature they cease growing and rot.

Again forestry harvests these ripe trees before nature destroys them by insects, decay, wind, or fire, and when mature timber is harvested by forestry methods, the second crop is assured and often is already established before the old trees are removed. The national forests of the Intermountain Region include 16,676,000 forested acres and contain nearly 48 billion board feet of timber over 12 inches in diameter breast high. These forests could grow annually 816 million board feet, but this growth can not take place if the old timber is allowed to usurp all the room and stunt the growth of the younger trees. At present the market of forest products in this region does not consume all the timber grown. The amount of timber 12 inches and over in diameter on the national forests of the Intermountain Region is shown below:

	M feet B. M.
Douglas fir.....	11, 554, 053
Ponderosa pine	11, 304, 883
Lodgepole pine.....	9, 689, 085
Engelmann spruce.....	6, 424, 942
Alpine fir.....	2, 291, 702
White fir	1, 650, 338
Limber pine.....	713, 587
Others.....	607, 798
Dead timber	3, 556, 545
 Total.....	 47, 792, 933

The amount of cordwood in this region is:

	Cords
Pinon juniper.....	16, 920, 000
Aspen.....	11, 450, 000
Mountain mahogany.....	4, 960, 000
 Total.....	 32, 931, 000

In 1930, 70 million board feet of timber was cut under sale from national forests of the Intermountain Region and 41 million feet given away under free use permit to 15,000 users.

The protection of this timber from insects is a stupendous task. In 1930, in cooperation with the Bureau of Entomology, over 69,000 trees infested with bark beetles and scattered over millions of acres, were sprayed with oil and burned to kill the insects before they emerged and destroyed other trees. Management of the timber, demands for each species of trees, a knowledge of the laws of growth, reproduction, and susceptibility to attack by the various insects and to attack by diseases and fire; a knowledge, too, of the relationship of these trees to watersheds, to scenic, aesthetic, and recreation values. Here, too, the Forest Service research organization conducts its investigations.

MINING

Over 2,000 mining claims came up for patent on the national forests of the Intermountain Region between 1906 and 1926. Of these claims 89 per cent were recommended for patent by the Forest Service; 10 per cent were canceled or relinquished as a result of protest, and 1 per cent was patented after hearing on protest. National forests are open to prospecting and the development of mineral resources is encouraged.



Tea Pot Lake, Wasatch National Forest

WILD LIFE

Fish and game are conserved on the national forests not only for the hunter and fisherman but also for those who get a thrill out of the mere sight of wild life in the woods. But protection alone is not sufficient for fish and game. To be sure, they must have protection against predatory animals and against man himself. But in addition they must have food and proper environment. This necessitates a study of fish foods, of game foods, and of the habits of fish and game. The Forest Service is cooperating with the State game departments in working out fish and game management plans; with the United States Bureau of Fisheries, which is conducting a study of forest waters to determine the suitability of various waters to fish planting, and with the United States Biological Survey in control of predatory animals.

Science has demonstrated that some lakes and streams are already overstocked with fish and depleted of fish food; that game ranges can also be overstocked and depleted of game forage. The Forest Service is working with the States in gathering facts upon which to improve plans for stocking and for protecting and utilizing both fish and game. Forest officers also assist the States by acting as deputy State game wardens and by adjusting livestock grazing to the needs of wild

life. Nearly a million acres of the national forests of this region have been closed to grazing on account of game.

RECREATION

The national forests of this region contain many areas with high scenic and recreation values. They are being enjoyed by an ever-increasing number of visitors. Most of these recreation areas are used by the same people many times during the season. In fact, outdoor recreation on these forests is becoming more and more a part of the life of the neighboring communities, as evidenced by the fact that the number of people using this group of forests for recreation increased from 138,000 in 1919 to 938,000 in 1929, or 600 per cent. In



Utah outdoor camp, Wasatch National Forest

F-253041

the management of timber and grazing, recreational values are given full consideration. Along highways and around camp grounds, and on areas of high scenic value, timber is not allowed to be cut, except in some cases where the forests could be improved by removing the defective or mature trees before they die, or in cases where the appearance and growing conditions can be improved by thinning. Grazing also is restricted where necessary for protection of recreation. Visitors are learning more and more to appreciate those forest arts which not only preserve but produce more beauty; those arts which intelligently harvest crops that would otherwise be wasted. Skillful use of forest resources adds to their value and makes them even more interesting and attractive. The most cultivated recreational tastes will see more beauty in preservation, use, and production than in mere preservation which stunts growth and results in decay or waste through natural enemies.

Recreational use of the national forests is being facilitated, as fast as funds become available, by installation of tables, benches, fireplaces, and comfort stations, and by patrolling to protect the water supply and to encourage campers to keep their camps sanitary. Millions of dollars are spent on roads and trails to develop the forests and to facilitate protection and administration. These also open up more points of interest and more opportunities for recreation. Special features, such as caves, wildernesses, game concentration areas, and areas of spectacular scenery, are set aside and managed accordingly. The public owns these forests and the more enjoyment derived from them the better. In management of recreation areas the free public camp grounds are given first consideration, but for those who desire exclusive use of small areas for summer homes, hotels, lodges, etc., there are many tracts for which annual or term permits may be secured.



National Forest Ranger on the trail

F-253091

PROTECTION

Every one of the national forest resources—watersheds, forage, timber, fish and game, and recreational features, is subject to destruction by fire. Lookout stations on mountain peaks, extensive telephone, trail, and road systems are maintained to detect and combat forest fires. Fire fighting entails great risk for the men employed and usurps large sums of money that might well be spent on fish and game management, development of recreation, and other resources. Man-caused fires can be prevented. Carelessness with fires places too many resources and too many lives in jeopardy to justify any leniency in enforcement of fire rules.

It is your forest—keep it green

SIX RULES FOR PREVENTING FIRE ON THE FORESTS

1. **Matches.**—Be sure your match is out. Break it in two before you throw it away.
2. **Tobacco.**—Be sure that pipe ashes and cigar or cigarette stubs are dead before throwing them away. Never throw them into brush, leaves, or needles. Place them in the road, trail, or on bare ground and stamp out with the foot.
3. **Making Camp.**—Before building a fire scrape away all inflammable material from a spot 5 feet in diameter. Dig a hole in center and in it build your camp fire. Keep your fire small. Never build it against trees or logs, or near brush.
4. **Breaking Camp.**—Never break camp until your fire is out—“*Dead out.*”
5. **Burning Brush.**—Never burn slash or brush in windy weather or while there is the slightest danger that the fire will get away.
6. **How to put out a camp fire.**—Stir the coals while soaking them with water. Turn small sticks and drench both sides. Wet the ground around the fire. If you can’t get water, stir in earth and tread it down until packed tight over and around the fire. *Be sure the last spark is dead.*

RECEIPTS AND EXPENDITURES

The Federal Government expended in 1930 for administration, roads, and other improvement of the national forests of the Intermountain Region \$2,382,991, and in addition turned over to the States for schools and roads 25 per cent of the gross receipts of the national forests or \$186,150, making the total expenditures \$2,569,141. The net 75 per cent receipts to the Federal Government were \$558,451.

THE ASHLEY NATIONAL FOREST FOREST SUPERVISOR, VERNAL, UTAH

The Ashley National Forest includes practically all of the eastern portion of the Uinta Mountain Range, which has the distinction of being the highest range of mountains in the United States that extends in an easterly and westerly direction. The highest peak in Utah (King’s Peak, elevation 13,498 feet) is in the Uinta Mountain Range. Other peaks on the Ashley are Mount Emmons (13,428 feet), Gilbert Peak (13,422 feet), Mount Lovinia (13,227 feet), and Wilson Peak (13,095 feet). In addition there are five peaks over 12,000 and many more over 11,000 feet in elevation. The high country is practically all glaciated and there are more than 500 lakes. Most of the lakes and streams provide good fishing. Very large areas are inaccessible

to travel except with saddle horses or on foot, and as a result much of the country is little known by recreationists. The eastern half of the High Uintas Primitive Area is on the Ashley. Although all of the best recreational areas are not accessible to the motorist, Moon Lake, Uinta River, Carter Creek, Beaver Creek, and Henry's Fork are easily reached by automobiles. Splendid camping places and good fishing are found at all these places.



Island Lake, Ashley National Forest, Utah

F-166540

There is a good auto road 110 miles in length between Green River, Wyo., on the Lincoln Highway, and Vernal, Utah, on the Victory Highway, or U. S. 40. This is the only auto road that crosses the Uinta Mountains. It passes near the Flaming Gorge dam site on Green River and the awe-inspiring Green River Gorge.

The Ashley National Forest took its name from William H. Ashley, of Virginia, fur trader and explorer in northern Utah and southern Idaho, 1820 to 1830.

There is more timbered area on the Ashley than on any other national forest in Utah. The timbered area is classified into the following types: Lodgepole pine, 430,000 acres; Engelmann spruce, 137,000 acres; ponderosa pine, 50,000 acres; aspen, 36,000 acres; Douglas fir, 32,000 acres; and other species, 46,000 acres. The total stand of timber 12 inches and over in diameter is 1,206 million board feet.

The Ashley stands near the top in the Intermountain Region in amount of timber cut annually. Practically all the timber cut goes into the development of farms and towns near the forest.

Over 100,000 sheep and 10,000 cattle and horses find summer pasturage on the forest yearly.

CACHE NATIONAL FOREST
FOREST SUPERVISOR, LOGAN, UTAH

The Pocatello Forest Reserve, created September 5, 1903; Logan Forest Reserve on May 29, 1903; the Bear River Forest Reserve on May 28, 1906; the Port Neuf on March 2, 1907, and the Monte Christo Division, January 24, 1912, are now parts of the Cache National Forest, the first consolidation occurring July 1, 1908.

Cache is the French for hiding place. There are a county and a valley in Utah of the same name as this national forest.



Summer home on Cache National Forest

F-253565

This forest, lying partly in Idaho, was never very heavily timbered and in the early days settlers cut over the forest severely. A good second crop of timber is now developing. There is a stand of 355 million board feet, mainly Douglas fir, Engelmann spruce, and lodgepole pine.

Areas of open land furnish forage for 25,000 cattle and horses and over 100,000 sheep owned by 1,200 permittees.

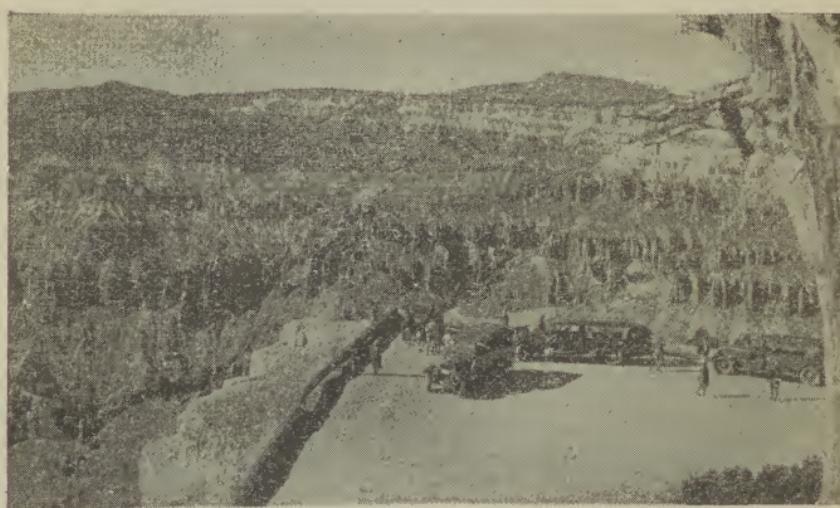
Public camp grounds line Logan Canyon and attractive recreation areas are scattered along the other roads.

Leave a clean camp and a clean record. Garbage, crippled game, and broken laws are poor monuments for tourists and sports-men to leave behind them

DIXIE NATIONAL FOREST
FOREST SUPERVISOR, CEDAR CITY, UTAH

Southwestern Utah, in which this national forest is located, is locally known as the "Dixie Country," because cotton was raised there during the Civil War. The Dixie Forest is in three divisions, one of which covers the Charleston Mountains in southeastern Nevada.

Within the Dixie 12,000 cattle and horses and 27,000 sheep are grazed annually under permit to 567 owners. The forest contains approximately 448,675,000 board feet of saw timber, about half of which is ponderosa pine. The other main species are Engelmann spruce, Douglas fir, and alpine fir.



Cedar Breaks, Dixie National Forest

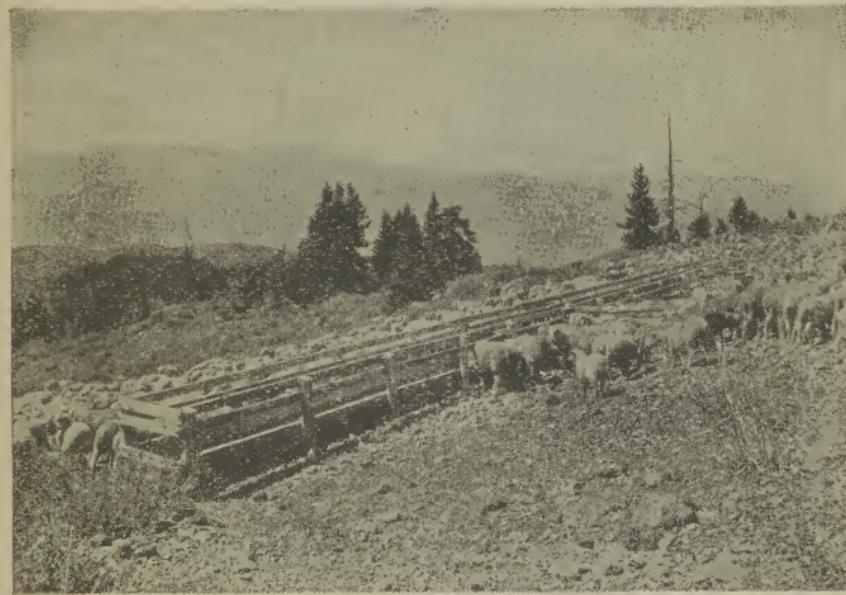
Among the recreational attractions, Cedar Breaks, a series of vast natural amphitheaters eroded to a depth of 2,000 feet by wind, water, and frost is outstanding. The rim of these breaks is 10,400 feet in elevation. The predominating color is pink, but this is blended with white, cream, purple, yellow, brown, green, red, and other colors. These tints are constantly changing with each new angle of the sun's rays and with every cloud shadow. A descriptive illustrated folder on Cedar Breaks may be obtained from the forest supervisor. Pine Valley Mountains, Navajo Lake, Panguitch Lake, Charleston Mountains, and many alpine parks also have strong scenic and recreational appeal. Camp grounds have been developed at Cedar Breaks, Navajo Lake, Duck Creek, and Parowan Canyon. At Cedar Breaks there is also the Union Pacific Lodge for accommodating the public. Fishing is good at Mammoth, Asay, Duck, Sidney, Pine Valley, and Butler Creeks, and also Panguitch and Navajo Lakes.

Deer are plentiful enough to supply good hunting, 1,500 bucks having been taken out during the hunting season of 1930.

FISHLAKE NATIONAL FOREST

FOREST SUPERVISOR, RICHFIELD, UTAH

The Fishlake and the Fillmore National Forests, established in 1899 and 1906, respectively, were consolidated in 1923 and now carry the name of the former. This forest reaches out into nine counties. The name is taken from Fish Lake, which is 6 miles long, 1 mile wide, and 120 feet deep. This lake has for many years been one of the chief pleasure resorts of Utah. In the early days trout taken from it furnished an important item of diet for the Indians and settlers.



F-253156

Sheep watering trough developed on Fishlake National Forest

The State Fish and Game Department has now stocked the lake with six different varieties, among which are eastern brook trout, rainbow, steelhead, and mackinaw. The last two varieties are becoming very large, and each year a number are caught weighing from 10 to 20 pounds. Thousands of trout fingerlings and larger trout are planted in the lake from the State Fish Hatchery at Glenwood and from the Government hatchery at Springville. In the spring of the year, the rainbow trout, and in the fall of the year, the eastern brook trout, go up the streams for spawning. The bed of the lake is approximately 8,800 feet above sea level. Along the shore there are many beautiful camping grounds. High-class hotel accommodations, campers' cabins, and boat service are furnished by two resorts. Over 30,000 people visit this lake annually.

To the north of Fish Lake is Seven Mile Creek, a beautiful stream which meanders its way down through one of the picturesque mountain valleys of the State.

Just east of Seven Mile Valley is Mount Marvin, elevation 11,600 feet, from which on a clear day one can see into seven counties of Utah.

The Salina Experiment Station, located on Gooseberry Creek, 17 miles east of Salina, is a place of special interest to stockmen and scientific investigators. Studies are conducted at this station of plants on the national forest ranges poisonous to livestock.

Puffer Lake, at an elevation of 9,000 feet, is 20 miles east of Beaver and near the headwaters of Beaver River. This entire region has many beautiful camping places.

Campers frequently make horseback rides to Mount Holly, Delano, 12,162 feet high, and Belknap Peak, 12,131 feet high, from which points a view of most of the central and southern parts of the State can be obtained.

The Beaver Mountains are noted for their large herds of mule deer. In 1930 the number was estimated to be approximately 7,000 head. Almost any time of the day, but especially morning and evening, deer can be seen at different places along the main highway extending from Beaver to Puffer Lake. Larger numbers are found farther away from the highway. Deer are also plentiful on the other parts of the forest.

Maple Grove, located at the base of Pioneer Mountain 20 miles west of Salina, provides an excellent place for parties making one-day outings.

Adelaide Park, 6 miles east of Kanosh; Oak Creek Canyon, 4 miles east of Oak City; Chalk Creek Canyon, just east of Fillmore; Meadow Creek Canyon, east of Meadow; and Maple Hollow, east of Holden, are all attractive recreation areas.

The timber on the Fishlake Forest is ponderosa pine, blue spruce, Engelmann spruce, Douglas fir, white fir, alpine fir, limber pine, aspen, pinon pine, and juniper. There is estimated to be 153,632,000 board feet over 12 inches in diameter. In addition to this there are 2,738,076 cords of fuel wood on the forest.

On areas particularly adapted for the growing of ponderosa pine trees, such as Oak Creek Canyon and the head of Salina Canyon, a few thousand trees of this species are planted each year. Seedlings 6 inches high, planted in 1914, are now 2 to 16 feet high.

Probably the most important resource on the forest is the forage. Each summer season this forage is utilized by 24,000 cattle and horses and 94,000 sheep, owned by 1,100 permittees.

**Do not pollute the springs, streams, or lakes
by insanitary acts**

HUMBOLDT NATIONAL FOREST

FOREST SUPERVISOR, ELKO, NEV.

There are a county, a lake, mountains, and a river in Nevada, as well as this forest, named for Baron Alexander von Humboldt, scientist, explorer, and author.

The Humboldt National Forest is not a good timber producer, but did make valuable contributions of timber to the early mining industry and still furnishes some saw timber and mining timbers and a lot of fuel and fence materials.

Two hundred and forty-two thousand sheep and 42,000 cattle and horses pasture here each summer. This is a fine livestock range and also a natural habitat of fish, grouse, sage hens, and deer, which are steadily increasing.



Jarbidge Canyon, Humboldt National Forest

F-253682

Jarbidge, the present heaviest gold-producing camp in Nevada, located in the interestingly scenic Jarbidge Canyon below Jarbidge Peaks, gets its timber, fuel, and water from the forest.

The Meadow Creek road leads to the famed old Gold Creek placer camp and into the heart of the Gold Creek Range. Mountain City road passes near Tuscarora (the "Ghost City" that mined \$65,000,000 of silver and gold), the Spanish Ranch, Cope Fort, and into Mountain City on the lava-bound Owyhee River.

With peaks 12,000 feet in elevation, deep, rugged canyons, a mountain lake bearing ice until July, natural fish streams, and alpine breezes, the Ruby Mountains offer valuable recreational possibilities.

The Santa Rosa Division is the center of summer grazing of livestock for its vicinity. Its fish, game, and recreation opportunities command increasing interest.

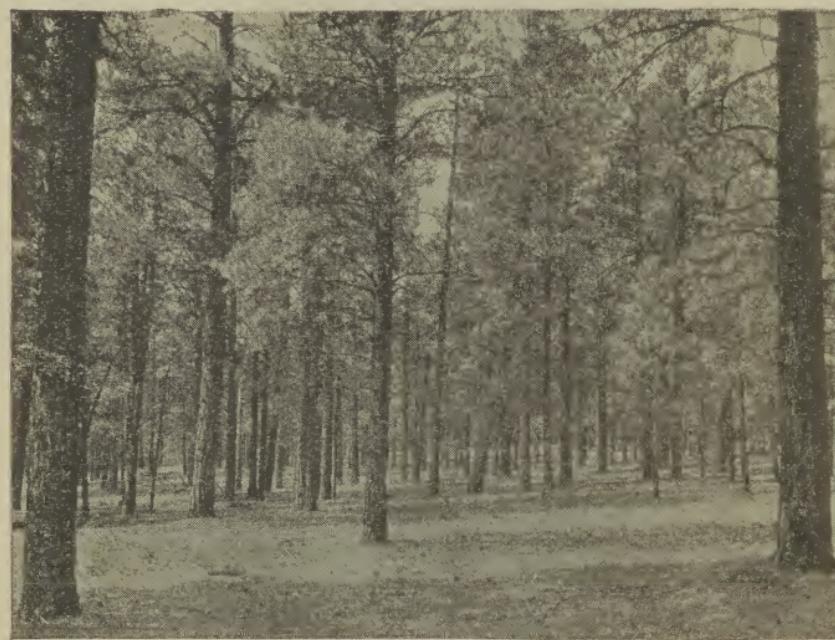
KAIBAB NATIONAL FOREST

FOREST SUPERVISOR, KANAB, UTAH

The name "Kaibab" is of Indian origin and means "mountain lying down" or a "big flat mountain."

The Kaibab National Forest includes the timbered top of the Trumbull Mountains to the west as well as the Kaibab Plateau, and originally took in what is now the Grand Canyon National Park.

This forest has no running streams, although summer rains are frequent and winter snows are from 3 to 8 feet deep. The top formation is porous limestone and water percolates through and finally seeps out into the Grand Canyon at such places as Roaring Springs and Thunder River, which are good-sized streams when first coming out of the mountain side.



The Kaibab National Forest

F-253481

The principal timber trees are ponderosa pine and blue spruce, and the estimate of commercial timber is $1\frac{1}{2}$ billion feet. Kaibab timber is as a rule rather young and not yet ready for the markets. There is some old timber scattered through, but deterioration has not begun to any extent.

The Grand Canyon Highway to North Rim traverses the entire Kaibab National Forest, which has 255 miles of good roads and 357 miles of motor ways. These motor ways are blazed routes through the woods over which autos can travel, and are primarily for fire prevention.

In addition to established lookout towers, 21 trees along the motor ways are equipped with ladders for climbing so that they, too, can be used as lookouts.

Domestic stock have been reduced from 15,000 cattle and 8,000 sheep in past years to 1,800 cattle and 2,405 sheep grazing at present. These are owned by 36 local permittees. This reduction was due principally to deterioration of outside ranges and to the policy of holding for deer all range abandoned or unutilized by domestic stock on the forest.

The Kaibab is noted for its large herd of mule deer and was once a famous Indian hunting ground, producing so many hides that it became known as "Buck-skin Mountain." At the time of the creation of the



F-253494

Hand-raised fawns from the Kaibab National Forest

Grand Canyon National Game Preserve in 1906, the herd was estimated to be 3,000. Since that time, under protection from hunters and predatory animals, the herd increased to between 30,000 and 50,000, reaching its peak in 1924 and also reaching the limit of its food supply. There were so many that all the annual growth of plants, and a little more besides, was eaten every year. Supervised hunting, trapping, and natural losses have reduced the herd to a number estimated at 20,000.

A game management plan is now being carried out by the Arizona Game and Fish Commission, and the Forest Service cooperating. The objectives of this plan are:

To protect the deer as a recreational attraction and keep as large a number as possible undisturbed on the summer range.

To maintain as large a herd of deer as the food supply will support in healthy condition, without serious injury to plant and tree growth.

To dispose of the excess by catching and raising fawns, trapping and shipping old deer to other ranges, and by closely supervised hunting.

The Kaibab squirrel is large, has a white tail, lives in the ponderosa pine trees, and is found nowhere except on the Kaibab Plateau. It does not lay by a store for winter but feeds on the bark of the pine twigs.

There are mountain lions, coyotes, foxes, and bobcats. These are kept in check by trapping and hunting for furs and trophies.

LA SAL NATIONAL FOREST

FOREST SUPERVISOR, MOAB, UTAH

The La Sal Forest, created January 25, 1906, and the Monticello, created February 6, 1907, were combined July 2, 1908. La Sal is Spanish for Salt Mountains.

Twelve thousand cattle and 42,000 sheep belonging to 97 permittees range on this forest. The principal timber is ponderosa pine, Douglas fir, and Engelmann spruce, the total stand of timber over 12 inches in diameter being 171,000,000 board feet.

Mount Peele, the pyramid in the La Sal Forest, towers approximately 13,000 feet. From its lofty height a panoramic view of the Great Colorado River is obtained.

U. S. Highway 450, from Moab to Monticello and continuing on to Blanding, Bluff, and the Natural Bridges, presents a scenic panorama of rare charm and beauty. Vari-colored cliffs, green-garbed hills, solitary monoliths, and wide valleys make the journey of ever-changing interest. The "Church Rock," a landmark of great renown, stands out like the pyramids of Egypt. The Natural Bridges of San Juan are reached by crossing a portion of the La Sal Forest.

The "Bears Ears," another landmark which stands out like a lighthouse, served as a beacon to the Mormon colonies sent out by the church during the early days of expansion. From this point is a wonderful view of the great desert, with its box canyons and inaccessible mesas where in years past "Mancos Jim," famous Indian chief, defied American soldiers.

When hunting or fishing, respect the
ranchman's property

MANTI NATIONAL FOREST
FOREST SUPERVISOR, EPHRAIM, UTAH

The Manti National Forest embraces the Wasatch Plateau and varies in elevation from 6,500 to more than 11,000 feet. This forest is named from the town of Manti in Utah. The name was taken from the ruined city of Manti near Caracas in Venezuela, mentioned in the Book of Mormon.

Ponderosa pine occurs at the lower elevations, while Douglas fir, Engelmann spruce, and white fir are the principal species for the higher elevations. The total stand is 228,000,000 board feet.

The number of grazing permittees (1,700) using the Manti Forest exceeds the number of permittees for any other forest in the United States. One hundred and forty thousand sheep and 17,000 cattle find pastureage here for the summer season. Grazing preferences are highly valued and local communities are dependent on the forage resources of this forest.

The Manti Forest contains large numbers of both deer and elk. Bear and cougar are plentiful, as are also many of the smaller fur-bearers.

Twelve Mile Canyon, Manti Canyon, Huntington Canyon, Joes Valley, Beaver Dam, Ephraim Canyon, Millers Flat, and Ferron Reservoir are the most used recreational areas.

The Sky Line Drive extends south from the Ephraim-Orangeville road to the head of Muddy and Twelve Mile Creeks. This road is at an elevation for the entire distance of from 9,500 to more than 11,000 feet. Most of the valleys of south Utah can be seen from this road and at some points the La Sal Mountains near the Colorado line and the Jeff Davis Peaks in Nevada are visible, making it possible to see across the State from one spot. High alpine meadows and sylvan glades, that at certain seasons of the year are covered with beautiful flowers, are penetrated by this Sky Line Drive.

Bituminous coal in large quantities underlies the greater part of the forest, especially the eastern half, and the many coal mines of Carbon and Emery Counties are busily engaged in mining this product. Bird's-eye marble and oil shale occur on the north end of the forest.

The Intermountain Forest and Range Experiment Station is conducting many research studies in range management and erosion control on this forest, and the public is welcome to visit these experiments.

Put out your campfire with water

NEVADA NATIONAL FOREST
FOREST SUPERVISOR, ELY, NEV.

The Nevada National Forest is in White Pine, Nye, and Lincoln Counties. This forest is comparatively unimportant for timber production; nevertheless, it contains 52,000,000 board feet of timber over 12 inches

of the State. Four thousand cattle and 53,000 sheep, owned by 76 permittees, have summer range on this forest.

The outstanding recreational attraction is Lehman Caves National Monument, 7 miles west from Baker and 64 miles southeast of Ely, over good roads. This



Mount Wheeler, highest peak in Nevada. Elevation 13,047 feet

in diameter, the principal species being ponderosa pine, Douglas fir, Engelmann spruce, alpine fir, and limber pine. There are also large areas of pinon and juniper which do not reach saw-timber size but furnish fuel and posts.

Stock raising is one of the most important industries

is a limestone cave with a variety of interesting and beautiful formations. Near the entrance is a Forest Service camp ground. Mount Wheeler, 13,047 feet in elevation and the highest peak in the State, towers in the background and affords a delightful hike or horseback trip.

POWELL NATIONAL FOREST
FOREST SUPERVISOR, PANGUITCH, UTAH

This national forest is named for Maj. J. W. Powell, geologist, explorer, founder and first director of the Bureau of Ethnology, Smithsonian Institution, and director of the Geological Survey, Department of the Interior, 1881 to 1894. On September 15, 1928, a portion of the forest was separated and the Bryce Canyon National Park was created. A scenic highway extends through the forest to the park, terminating at the lodge on the "Rim" of Bryce Canyon.

The Powell National Forest varies from practically level to extremely rough and broken country. The elevations range from a minimum of 6,000 feet to a maximum of 11,363 feet at Bluebell Knoll on the Boulder Top Plateau. This plateau comprises an area of about 70 square miles in the northeast part of the forest, with a mean elevation of about 11,000 feet. A wonderful view of the surrounding country can be had from the rim of the plateau in many places. Table Cliff Plateau, some 40 miles to the south and west, has an area of about 9 square miles, with an average elevation of about 10,000 feet. The rim is of limestone formation and has the same beautiful colorings that have made Bryce Canyon National Park famous. The Table Cliff point affords one of the most wonderful views in this locality. Distant peaks, or known landmarks, can be observed on a clear day in four separate States—Colorado, Arizona, Nevada, and Utah. To reach either of the plateaus necessitates a horseback trip.

There are many attractive camping places within the forest that can be reached by auto, and at Pine Lake some camp ground improvements have been made for the convenience and accommodation of the public.

The only big game found on the Powell are the mule deer. They are not numerous and are seldom seen from the highways traversing the forests. Numerous mountain streams and lakes furnish comparatively good trout fishing. Probably the best sage-chicken grounds within the State are found within and adjacent to the Powell. A few ducks of various species summer on the mountain lakes.

The Powell contains about $1\frac{1}{4}$ billion board feet of timber over 12 inches in diameter. The species are ponderosa pine, Douglas fir, Engelmann spruce, alpine fir, and limber pine. During the past 10 or 12 years a large per cent of the Engelmann spruce has been killed by beetles.

In 1930, 12,755 head of cattle and horses and 88,385 sheep, owned by 500 permittees, grazed on the Powell Forest.

TOIYABE NATIONAL FOREST

FOREST SUPERVISOR, AUSTIN, NEV.

The Toiyabe National Forest is named from the Toiyabe Mountains in Nevada, which are included in the forest. The name is an Indian word meaning "big hills."

The present route of the Lincoln Highway, which follows closely the old Overland Trail, was first located in 1851 by Col. John Reese, one of the old Mormon settlers of Salt Lake Valley. This route crossed the north end of the Toiyabe National Forest, and Reese River, one of the main streams rising on the Toiyabe, was named for him.

The ranges of the Toiyabe produce nutritious forage and furnish summer feed for 11,130 cattle and horses and 41,035 sheep, owned by 110 permittees. Part of the stock is permitted on the forest during the winter.

People accustomed to dense timber growth are prone to scoff at the "brush forests" of the Toiyabe, little realizing their tremendous importance in protecting watersheds, which furnish water for irrigation and domestic use for many fine ranches and several small settlements.

The forest, although not considered a commercial "timber forest," contains 11,000,000 board feet of limber pine and considerable juniper, pinon pine, mountain mahogany, and aspen. The timber is a valuable asset to local settlers and mining interests and highly valuable as protection to watersheds.

This is one of the few national forests on which antelope and mountain sheep are found. It contains approximately 40 mountain sheep, 31 antelope, and 1,975 mule deer. Sage hens and grouse, although not at present found in abundance, inhabit the entire Toiyabe Forest.

Several streams are being stocked with fish annually by the Toiyabe Club, the State Fish and Game Commission, and forest officers.

Among the choice camp grounds are Kingston and Big Creek Canyons, where recreational improvements are being made by the Forest Service. There are a number of hot springs in and near the forest which are noted for their medicinal values. The most important are the Spencer and Darrough Hot Springs in Big Smoky Valley and the Potts Hot Springs near the Potts Ranger Station. There is also an old crater called "Diana's Punch Bowl" located near the Potts Ranger Station in Monitor Valley, about 100 feet in diameter, the rim of which extends about 50 feet above the boiling pool of water.

UINTA NATIONAL FOREST
FOREST SUPERVISOR, PROVO, UTAH

National forests in Utah had their beginning in 1897 when President Cleveland set aside the Uinta Forest Reserve, comprising the greater part of the Uinta range of mountains. Later President McKinley established the Payson Forest Reserve, now the Nebo division of the Uinta. Still later, in 1905, the west end of the former Uinta Indian Reservation and adjacent parts of the Wasatch Mountains were added. In 1908 the greater part of the Uinta Mountains was segregated as the Ashley National Forest and more recently the remainder of this mountain range was transferred to the Wasatch Forest.



Cattle on the Uinta National Forest

F-49815A

The name Uinta is that of a branch of the Ute Indians in northeastern Utah. A county and mountain range in Utah and a county in Wyoming bear the same name. Uinta means "pine land."

The west slope of the Uinta Forest is a series of high, rugged mountains cut by picturesque canyons, each usually having a rushing stream of clear, sparkling water, with high open basins at its headwaters. The east slopes are more gentle with rolling hills and large mountain valleys. The largest of these is the Strawberry Valley, in which lies the great reservoir and watershed of the reclamation project of the same name. Under this project water is stored and, by means of a 3-mile tunnel through the backbone of the divide, diverted to the opposite side of the mountain range for irrigation of the fertile lands of Utah Valley.

The scattered stands of conifer timber on the mountain slopes were heavily cut and logged in the early days of the settlement of the surrounding valleys, but these timber stands are reproducing under regulation and protection by the Forest Service, the present stand consisting mainly of Englemann spruce, Douglas fir, lodgepole pine, and alpine fir containing over 208 million board feet over 12 inches in diameter. Vast stands of aspen at the higher elevations, and mountain maple and oak growing lower down afford an easily accessible supply of fuel to the local residents.

A large and successful livestock industry has been built around the luxuriant growth of grasses, weeds, and palatable browse which furnish choice summer forage for 25,000 cattle and 177,000 sheep, belonging to 1,000 permittees. Beef and mutton from Uinta forest ranges have won an enviable reputation on the livestock markets.



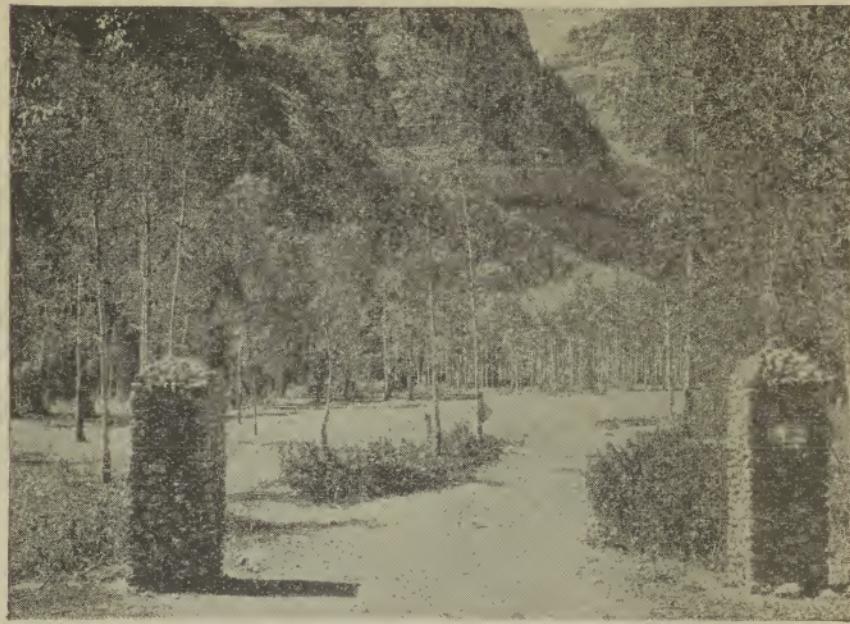
Mine props from the Wasatch National Forest

The forest is fairly well stocked with mule deer and a herd of elk or wapiti range in the Nebo division. Nearly all of the streams have mountain trout. Because of their easy accessibility the streams are heavily fished during all of the open season.

Hobble Creek Canyon east of Springville is entered by a good mountain road leading to popular camping places. The same is true of Payson and Santaquin Canyons at the north end of the Nebo division, the roads leaving the main highway, U. S. 91, at the towns of the same name. From Moroni, in Sanpete County, a short road leads west to the picturesque, boxlike Maple Canyon. The Diamond Fork road follows the

early route of Escalante, Spanish explorer and first white man of historical record to enter the Utah Lake Valley.

The Victory Highway (U. S. 40), the Midland Trail (U. S. 50), and several other high-class roads, as shown on the map, lead to many favorite recreation grounds.



F-253031

Aspen Grove where thousands start the annual Timpanogos hike

WASATCH NATIONAL FOREST

FOREST SUPERVISOR, SALT LAKE CITY, UTAH

The Wasatch Forest lies in four divisions—the Uintas, the Wasatch, the Stansbury, and Sheep Rock ranges.

Wasatch is Ute or Paiute for "not known." The national forest is named from the Wasatch range in Utah.

There are 1,481,000,000 board feet of timber over 12 inches in diameter on the forest, the principal species being lodgepole pine, Engelmann spruce, and Douglas fir. Many thousand railroad ties have been cut from the north slopes of the Uinta Range. From the head of Provo River and Weber River also mining timber and telephone poles are cut.

Ten thousand cattle and 74,000 sheep are grazed under 540 permits on this forest. Range is in big demand and permits are small, some covering only one or two head of cattle.

Mining has long been an important activity within this forest, many claims having been patented.

Because of its accessibility, this forest has the heaviest recreational use of any national forest in the Intermountain Region.

Fire drives away the game

The flora ranges from the semidesert type at 5,000 feet elevation to the alpine type at more than 11,000 feet, and consists of a great variety of trees, shrubs, flowers, and grasses, which, together with the unusual geological features, offer rare opportunities for nature studies.

The typical wild life of Utah is represented, including elk, mule deer, black and brown bear, grouse and pheasant, and fur-bearing animals, such as coyote, bobcat, mountain lion, beaver, marten, and mink. The lakes and streams afford opportunities for fishing.



Trail to Timpanogos National Monument

F-253057

Camping and picnicking facilities are excellent. The average visitor may find almost any kind of camping or picnicking opportunity by lake, stream, or meadow, with auto, pack horse, or by hiking. Winter sports in the more accessible canyons are also becoming popular. Approximately 130,000 recreationists visit this forest annually. The Utah Outdoor Camp in Big Cottonwood Canyon, 22 miles from Salt Lake City, with more than 50 tents and cabins, is operating at cost to accommodate the public. This camp may be reached by auto or stage. Timpanogos Cave, a national monument, located near the mouth of American Fork

Canyon, and electrically illuminated, has beautiful and delicate stalagmites and stalactites. Mount Timpanogos, the highest peak on this range, towers to a height of 11,957 feet.

One division of the Wasatch Forest lies on the west end of the Uinta Range, the highest east and west range of mountains in the United States. These mountains are densely timbered with lodgepole pine, spruce, aspen, and other species. The high country is accessible to motorists only as far as Mirror Lake. It is a wonderful country for the more adventurous, abounding in lakes and rugged peaks along the main divide.



Off for the Primitive Area

F-253295

HIGH UNTAS PRIMITIVE AREA

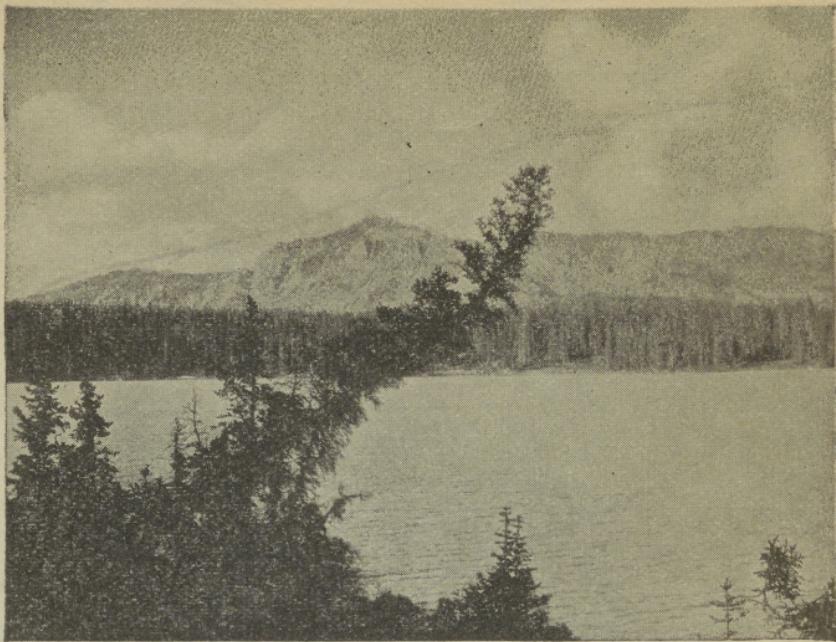
The central portion of the Uinta Mountain Range, comprising approximately 24,000 acres, 115,000 acres of which are in the Ashley Forest, has been set aside as the High Uintas Primitive Area, to be kept in an unmodified state for educational and recreational purposes, in so far as controlling economic factors will permit. It can be reached only by foot or horseback and is entered from the end of roads at Mirror Lake, Moon Lake, Big Park, the Uinta River, and China Lake meadows. Prominent topographical features of this area are Kings Peak, 13,498 feet, the highest in the State of Utah, and Wilson, Red Castle, Tokewanna, La Motte, Hayden, and Agasie Peaks. The principal lakes of the area are Granddaddy Lakes, Fish Lakes, Daynes Lakes, Pine Islands Lakes, Clements Lake, and Brown Duck Lakes. The capacious and amphitheater-like basins near the crest of the range are of considerable interest. The region is dotted with large and small lakes in which there is excellent fishing.

The next fellow will appreciate
your clean camp

HEALTH RULES

- 1. Purification.**—Mountain streams will not purify themselves in a few hundred feet. Boil all suspected water.
- 2. Garbage.**—Burn or bury all garbage, papers, tin cans, and old clothes where garbage receptacles and incinerators are not provided.
- 3. Washings.**—Do not wash soiled clothing, utensils, or bodies in streams, lakes, or springs. Use a container and throw dirty water on ground away from water supply.
- 4. Toilets.**—Use public toilets where available. They should be properly located to protect the water against contamination.
- 5. Excretions.**—Where toilets have not been provided, bury a foot deep all human excrement at least 200 feet from streams, lakes, or springs.
- 6. Observe laws.**—Observe rules and endeavor to have others do the same. National and State laws inflict heavy penalties for health-law violators. Report all violations or insanitary conditions (including dead animals) to nearest health officer or U. S. Forest Officer.





The High Uintas

F-253275

THE CODE OF GOOD SPORTSMEN

1. There is more honor in giving the game a square deal than in getting the limit.
2. Help enforce the game laws. Game and fish are public property—for the enjoyment of both yourself and the fellow who comes after you. Violations of game laws should be reported to the nearest deputy game warden or forest ranger.
3. Respect the ranchman's property. Do not leave his gates open, break down his fences, disturb his stock, or shoot near his dwelling. Put yourself in his place. Ask his permission to hunt on his premises.
4. Be careful with your camp fire and matches. One tree will make a million matches; one match can burn a million trees.
5. Leave a clean camp.
6. Put out all forest fires discovered if you can. If you can not put them out, report them promptly to the nearest forest officer.

There is more honor in giving the game a square deal than in getting the limit



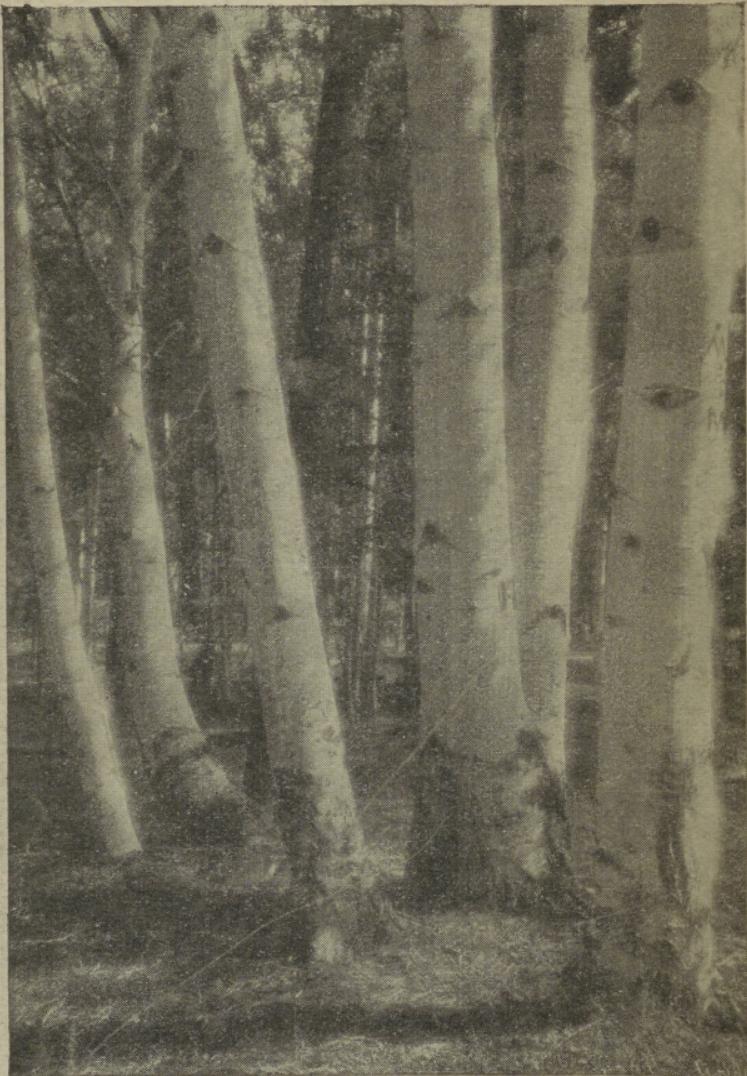
Nov 11 1932 U.S. Forest Service

NATIONAL FORESTS

INTERMOUNTAIN REGION (Southern Half)



Northern Arizona, Utah, and Nevada



F-253510

UNITED STATES
DEPARTMENT OF AGRICULTURE



Forest Service—Intermountain Region

Prepared by Regional Forester
Ogden, Utah

